

*Mary Angela Markel*

**NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.**

## OIL, GAS AND MINERAL LEASE

THIS AGREEMENT (this "Lease") made this 15<sup>th</sup> day of November, 2007, between Christopher Alan Markel and Wife, Mary Angela Markel, as Lessor (whether one or more), whose address is: 6401 Freedom Ct., Arlington, TX 76017, and Carrizo Oil and Gas, Inc., whose address is 1000 Louisiana, Suite 1500, Houston, Texas, 77002, called Lessee, does witness that:

All printed portions of this lease were prepared by the party hereinabove named as Lessee, but all other provisions (including the completion of blank spaces) were prepared jointly by Lessor and Lessee.

1. In consideration of a cash bonus in hand paid and the covenants herein contained, Lessor hereby grants, leases and lets exclusively to Lessee the following described land, hereinafter called leased premises:

Being Lot 15, Block 15, of the Colonial Estates, Phase 1, An Addition to the City of Arlington, Tarrant County, Texas, according to the Map or Plat thereof recorded in Volume 388-175, Page 43, of the plat Records of Tarrant County, Texas.

in the county of Tarrant, State of Texas, containing 0.253665 gross acres, more or less (including any interests therein which Lessor may hereafter acquire by reversion, prescription or otherwise), for the purpose of exploring for, developing, producing and marketing oil and gas, along with all hydrocarbon and non-hydrocarbon substances produced in association therewith (including geophysical/seismic operations). The term "gas" as used herein includes helium, carbon dioxide and other commercial gases, as well as hydrocarbon gases. In addition to the above-described leased premises, this lease also covers accretions and any small strips or parcels of land now or hereafter owned by Lessor which are contiguous or adjacent to the above-described leased premises, and, in consideration of the aforementioned cash bonus, Lessor agrees to execute at Lessee's request any additional or supplemental instruments for a more complete or accurate description of the land so covered. For the purpose of determining the amount of any shut-in royalties hereunder, the number of gross acres above specified shall be deemed correct, whether actually more or less.

2. This lease, which is a "paid-up" lease requiring no rentals, shall be in force for a primary term of **3 years** from the date hereof, and for as long thereafter as oil or gas or other substances covered hereby are produced in paying quantities from the leased premises or from lands pooled therewith or this lease is otherwise maintained in effect pursuant to the provisions hereof.

3. Royalties on oil, gas and other substances produced and saved hereunder shall be paid by Lessee to Lessor as follows: (a) For oil and other liquid hydrocarbons separated at Lessee's separator facilities, the royalty shall be **25%** of such production, to be delivered at Lessee's option to Lessor at the wellhead or to Lessor's credit at the oil purchaser's transportation facilities, provided that Lessee shall have the continuing right to purchase such production at the wellhead market price then prevailing in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) for production of similar grade and gravity; (b) for gas (including casinghead gas) and all other substances covered hereby, the royalty shall be **25%** of the proceeds realized by Lessee from the sale thereof, less a proportionate part of ad valorem taxes and production, severance, or other excise taxes and the costs incurred by Lessee in delivering, processing or otherwise marketing such gas or other substances, provided that Lessee shall have the continuing right to purchase such production at the prevailing wellhead market price paid for production of similar quality in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) pursuant to comparable purchase contracts entered into on the same or nearest preceding date as the date on which Lessee commences its purchases hereunder; and (c) if at the end of the primary term or any time thereafter one or more wells on the leased premises or lands pooled therewith are capable of producing oil or gas or other substances covered hereby in paying quantities, but such well or wells are either shut-in or production therefrom is not being sold by Lessee, such well or wells shall nevertheless be deemed to be producing in paying quantities for the purpose of maintaining this lease. If for a period of 90 consecutive days such well or wells are shut-in or production therefrom is not being sold by Lessee, then Lessee shall pay shut-in royalty of one dollar per acre then covered by this lease, such payment to be made to Lessor or to Lessor's credit in the depository designated below, on or before the end of said 90-day period and thereafter on or before each anniversary of the end of said 90-day period while the well or wells are shut-in or production therefrom is not being sold by Lessee; provided that if this lease is otherwise being maintained by operations, or if production is being sold by Lessee from another well or wells on the leased premises or lands pooled therewith, no shut-in royalty shall be due until the end of the 90-day period next following cessation of such operations or production. Lessee's failure to properly pay shut-in royalty shall render Lessee liable for the amount due, but shall not operate to terminate this lease.

4. All shut-in royalty payments under this lease shall be paid or tendered to Lessor or its successors, which shall be Lessor's depository agent for receiving payments regardless of changes in the ownership of said land. All payments or tenders may be made in currency, or by check or by draft and such payments or tenders to Lessor or to the depository by deposit in the US Mails in a stamped envelope addressed to the depository or to the Lessor at the last address known to Lessee shall constitute proper payment. If the depository should liquidate or be succeeded by another institution, or for any reason fail or refuse to accept payment hereunder, Lessor shall, at Lessee's request, deliver to Lessee a proper recordable instrument naming another institution as depository agent to receive payments.

5. If Lessee drills a well which is incapable of producing in paying quantities (hereinafter called "dry hole") on the leased premises or lands pooled therewith, or if all production (whether or not in paying quantities) permanently ceases from any cause, including a revision of unit boundaries pursuant to the provisions of Paragraph 6 or the action of any governmental authority, then in the event this lease is not otherwise being maintained in force it shall nevertheless remain in force if Lessee commences operations for reworking an existing well or for drilling an additional well or for otherwise obtaining or restoring production on the leased premises or lands pooled therewith within 90 days after completion of operations on such dry hole or within 90 days after such cessation of all production. If at the end of the primary term, or at any time thereafter, this lease is not otherwise being maintained in force but Lessee is then engaged in drilling, reworking or any other operations reasonably calculated to obtain or restore production therefrom, this lease shall remain in force so long as any one or more of such operations are prosecuted with no cessation of more than 90 consecutive days, and if any such operations result in the production of oil or gas or other substances covered hereby, as long thereafter as there is production in paying quantities from the leased premises or lands pooled therewith. After completion of a well capable of producing in paying quantities hereunder, Lessee shall drill such additional wells on the leased premises or lands pooled therewith as a reasonably prudent operator would drill under the same or similar circumstances to (a) develop the leased premises as to formations then capable of producing in paying quantities on the leased premises or lands pooled therewith, or (b) to protect the leased premises from uncompensated drainage by any well or wells located on other lands not pooled therewith. There shall be no covenant to drill exploratory wells or any additional wells except as expressly provided herein.

6. Lessee shall have the right but not the obligation to pool all or any part of the leased premises or interest therein with any other lands or interests, as to any or all depths or zones, and as to any or all substances covered by this lease, either before or after the commencement of production, whenever Lessee deems it necessary or proper to do so in order to prudently develop or operate the leased premises, whether or not similar pooling authority exists with respect to such other lands or interests. The unit formed by such pooling for an oil well which is not a horizontal completion shall not exceed 80 acres plus a maximum acreage tolerance of 10%, and for a gas well or a horizontal completion shall not exceed 640 acres plus a maximum acreage tolerance of 10%; provided that a larger unit may be formed for an oil well or gas well or horizontal completion to conform to any well spacing or density pattern that may be prescribed or permitted by any governmental authority having jurisdiction to do so. For the purpose of the foregoing, the terms "oil well" and "gas well" shall have the meanings prescribed by applicable law or the appropriate governmental authority, or, if no definition is so prescribed, "oil well" means a well with an initial gas-oil ratio of less than 100,000 cubic feet per barrel and "gas well" means a well with an initial gas-oil ratio of 100,000 cubic feet or more per barrel, based on 24-hour production test conducted under normal producing conditions using standard lease separator facilities or equivalent testing equipment; and the term "horizontal completion" means an oil well in which the horizontal component of the gross completion interval in the reservoir exceeds the vertical component thereof. In exercising its pooling rights hereunder, Lessee shall file of record a written declaration describing the unit and stating the effective date of pooling. Production, drilling or reworking operations anywhere on a unit which includes all or any part of the leased premises shall be treated as if it were production, drilling or reworking operations on the leased premises, except that the production on which Lessor's royalty is calculated shall be that proportion of the total unit production which the net acreage covered by this lease and included in the unit bears to the total gross acreage in the unit, but only to the extent such proportion of unit production is sold by Lessee. Pooling in one or more instances shall not exhaust Lessee's pooling rights hereunder, and Lessee shall have the recurring right but not the obligation to revise any unit formed hereunder by expansion or contraction or both, either before or after commencement of production, in order to conform to the well spacing or density pattern prescribed or permitted by the governmental authority having jurisdiction, or to conform to any productive acreage determination made by such governmental authority. In making such a revision, Lessee shall file of record a written declaration describing the revised unit and stating the effective date of revision. To the extent any portion of the leased premises is included in or excluded from the unit by virtue of such revision, the proportion of unit production on which royalties are payable hereunder shall thereafter be adjusted accordingly. In the absence of production in paying quantities from a unit, or upon permanent cessation thereof, Lessee may terminate the unit by filing of record a written declaration describing the unit and stating the date of termination. Pooling hereunder shall not constitute a cross-conveyance of interests.

7. If Lessor owns less than the full mineral estate in all or any part of the leased premises, the royalties and shut-in royalties payable hereunder for any well on any part of the leased premises or lands pooled therewith shall be reduced to the proportion that Lessor's interest in such part of the leased premises bears to the full mineral estate in such part of the leased premises.

8. The interest of either Lessor or Lessee hereunder may be assigned, devised or otherwise transferred in whole or in part, by area and/or by depth or zone, and the rights and obligations of the parties hereunder shall extend to their respective heirs, devisees, executors, administrators, successors and assigns. No change in Lessor's ownership shall have the effect of reducing the rights or enlarging the obligations of Lessee hereunder, and no change in ownership shall be binding on Lessee until 60 days after Lessee has been furnished the original or certified or duly authenticated copies of the documents establishing such change of ownership to the satisfaction of Lessee or until Lessor has satisfied the notification requirements contained in Lessee's usual form of division order. In the event of the death of any person entitled to shut-in royalties hereunder, Lessee may pay or tender such shut-in royalties to the credit of decedent or decedent's estate in the depository designated above. If at any time two or more persons are entitled to shut-in royalties hereunder, Lessee may pay or tender such shut-in royalties to such persons or to their credit in the depository, either jointly or separately in proportion to the interest which each owns. If Lessee transfers its interest hereunder in whole or in part Lessee shall be relieved of all obligations thereafter arising with respect to the transferred interest, and failure of the transferee to satisfy such obligations with respect to the transferred interest shall

not affect the rights of Lessee with respect to any interest not so transferred. If Lessee transfers a full or undivided interest in all or any portion of the area covered by this lease, the obligation to pay or tender shut-in royalties hereunder shall be divided between Lessee and the transferee in proportion to the net acreage interest in this lease then held by each.

9. Lessee may, at any time and from time to time, deliver to Lessor or file of record a written release of this lease as to a full or undivided interest in all or any portion of the area covered by this lease or any depths or zones thereunder, and shall thereupon be relieved of all obligations thereafter arising with respect to the interest so released. If Lessee releases all or an undivided interest in less than all of the area covered hereby, Lessee's obligation to pay or tender shut-in royalties shall be proportionately reduced in accordance with the net acreage interest retained hereunder.

10. Lessee's obligations under this lease, whether express or implied, shall be subject to all applicable laws, rules, regulations and orders of any governmental authority having jurisdiction, including restrictions on the drilling and production of wells, and regulation of the price or transportation of oil, gas and other substances covered hereby. Lessor hereby agrees that, in the event Lessee deems it necessary to seek a variance, waiver or other relief from any laws, rules, regulations, or orders (which for purposes of this paragraph shall include any ordinance) or other such authority exercised by (i.) the City of Arlington, including but not limited to the well setback distance for gas drilling and production, or (ii.) by any other governmental entity or authority having jurisdiction, then Lessor shall engage in reasonable acts and execute and deliver such instruments and documents Lessee deems necessary or convenient in seeking such relief. In the event Lessee is required by such authority to acquire Lessor's consent as a prerequisite to obtain such variance, waiver or other relief, Lessor grants to Lessee and agrees that Lessee's leasehold estate acquired hereunder includes the right to utilize this lease as Lessor's consent and ratification of any subsequent variance, waiver or other relief Lessee seeks, without the necessity of Lessee obtaining any additional or subsequent consent/s from Lessor. Lessor furthermore agrees not to execute documents or instruments or engage in acts that would diminish or adversely affect the relief Lessee is seeking.

11. Lessee's obligations under this lease, whether express or implied, shall be subject to all applicable laws, rules, regulations and orders of any governmental authority having jurisdiction including restrictions on the drilling and production of wells, and the price of oil, gas, and other substances covered hereby. When drilling, reworking, production or other operations are prevented or delayed by such laws, rules, regulations or orders, or by inability to obtain necessary permits, equipment, services, material, water, electricity, fuel, access or easements, or by fire, flood, adverse weather conditions, war, sabotage, rebellion, insurrection, riot, strike or labor disputes, or by inability to obtain a satisfactory market for production or failure of purchasers or carriers to take or transport such production, or by any other cause not reasonably within Lessee's control, this lease shall not terminate because of such prevention or delay, and at Lessee's option, the period of such prevention or delay shall be added to the term hereof. Lessee shall not be liable for breach of any express or implied covenants of this lease when drilling, production or other operations are so prevented, delayed or interrupted.

12. In the event that Lessor, during the primary term of this lease, receives a bona fide offer which Lessor is willing to accept from any party offering to purchase from Lessor a lease covering any or all of the substances covered by this lease and covering all or a portion of the land described herein, with the lease becoming effective upon expiration of this lease, Lessor hereby agrees to notify Lessee in writing of said offer immediately, including in the notice the name and address of the offeror, the price offered and all other pertinent terms and conditions of the offer. Lessee, for a period of fifteen days after receipt of the notice, shall have the prior and preferred right and option to purchase the lease or part thereof or interest therein, covered by the offer at the price and according to the terms and conditions specified in the offer.

13. No litigation shall be initiated by Lessor with respect to any breach or default by Lessee hereunder, for a period of at least 90 days after Lessor has given Lessee written notice fully describing the breach or default, and then only if Lessee fails to remedy the breach or default, within such period. In the event the matter is litigated and there is a final judicial determination that a breach or default has occurred, this lease shall not be forfeited or canceled in whole or in part unless Lessee is given a reasonable time after said judicial determination to remedy the breach or default and Lessee fails to do so.

14. Lessee shall not conduct any surface operations upon any part of the surface of the lease premises. Lessee shall however have a sub-surface easement to horizontally drill under the surface of the lease premises. Notwithstanding anything contained herein to the contrary, Lessee shall have the right to conduct seismic operations, but only by virtue of the vibroseis-method. Lessee shall employ such measures as will reduce the impact upon, improvements, vegetation and game habitat on the lease premises. Lessee shall pay for all damages related to seismic operations. Other than seismic operations, by execution of this Lease, Lessee does not otherwise obtain the right to conduct exploration, excavation or drilling operations from or upon the surface of any portion of the lease premises.

15. Lessor hereby warrants and agrees to defend title conveyed to Lessee hereunder, and agrees that Lessee at Lessee's option may pay and discharge any taxes, mortgages or liens existing, levied or assessed on or against the leased premises. If Lessee exercises such option, Lessee shall be subrogated to the rights of the party to whom payment is made, and, in addition to its other rights, may reimburse itself out of any royalties or shut-in royalties otherwise payable to Lessor hereunder. In the event Lessee is made aware of any claim inconsistent with Lessor's title, Lessee may suspend the payment of royalties and shut-in royalties hereunder, without interest, until Lessee has been furnished satisfactory evidence that such claim has been resolved.

16. This Lease may be executed in any number of counterparts, no one of which needs to be executed by all Parties, or this Lease may be ratified by separate written instrument specifically referring hereto, and it shall be binding upon all Parties who executed a counterpart or ratification instrument with the same force and effect, with each separate counterpart or ratification instrument deemed to be one and same original Lease.

IN WITNESS WHEREOF, this lease is executed to be effective as of the date first written above, but upon execution shall be binding on the signatory and the signatory's heirs, devisees, executors, administrators, successors and assigns, whether or not this lease has been executed by all parties hereinabove named as Lessor.

IN WITNESS WHEREOF this instrument is executed on the date first above written.

LESSOR: Christopher Alan Markel

LESSOR: Mary Angela Markel

Name: Christopher Alan Markel  
(Individually and in all Capacities for the above described Land)

Name: Mary Angela Markel  
(Individually and in all Capacities for the above described Land)

Title: Lessor

Title: Lessor

STATE OF TEXAS

COUNTY OF Tarrant

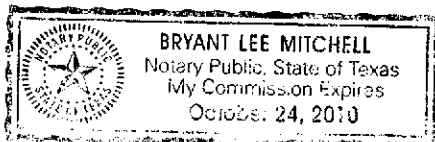
Before me, the undersigned authority, on this day personally appeared Christopher Alan Markel and known to me to be the person whose name is subscribed to the forgoing instrument, and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this 15 day of Nov, 2007.

Notary Public, State of Texas

Bryant Lee Mitchell  
Notary's printed name

My commission expires:



STATE OF TEXAS

COUNTY OF Tarrant

Before me, the undersigned authority, on this day personally appeared Mary Angela Markel, known to me to be the person whose name is subscribed to the forgoing instrument, and acknowledged to me that he/she executed the same and for the purpose and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this 15 day of Nov, 2007.

Notary Public, State of Texas

Bryant Lee Mitchell  
Notary's printed name

My commission expires:

